CASE REPORT

Exacerbation of Occult Femoral Hernia During Laparoscopic Prostatectomy

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ABSTRACT

Laparoscopic prostatectomy has been accepted as an appropriate treatment for prostate cancer because of the shorter hospital stay and quicker recovery. We present a rare complication of groin hernia with incarceration and necrosis of small bowel following laparoscopic prostatectomy. Occult hernias and small fascia defects may not always be apparent pre-operatively, but extension of pneumoperitoneal insufflation to extraperitoneal compartments should alert the surgeon to the possible presence of such a defect.

Key Words: Prostatectomy, Laparoscopy, Groin hernia.

INTRODUCTION

Laparoscopy is now widely used in urology for both upper and lower urinary tract surgery. Laparoscopic prostatectomy has been accepted as an appropriate treatment for prostate cancer at some institutions because of the shorter hospital stay and quicker recovery. Pneumoperitoneum is a necessity in laparoscopy, and it has been associated with complications, such as retroperitoneal or preperitoneal insufflation, or both, and gas embolism. Groin hernia following laparoscopy has been described, but it is a rare complication of pneumoperitoneum.[1,2] Clinically evident femoral hernias occur in 0.5% of the general population, but the prevalence of occult femoral hernias has not been well described. To our knowledge, our case represents the third reported occurrence of occult femoral hernia exacerbation after laparoscopy, and the first reported occurrence of groin hernia associated with laparoscopic prostatectomy.

CASE REPORT

A 71-year-old man underwent laparoscopic prostatectomy as treatment for adenocarcinoma of the prostate. A preoperative biopsy revealed a Gleason grade 3+4 tumor, and his serum prostate specific antigen was 6.4 ng/mL (normal <4.10 ng/mL). A transabdominal approach was used, and carbon dioxide was used to achieve pneumoperitoneum. No intraoperative complications occurred at the time of surgery; however, it was noted that gas from the pneumoperitoneum had tracked to the scrotum and penis. Visual inspection of the pelvis did not reveal the presence of an inguinal or femoral hernia. Total operative time was 5.5 hours.

The patient did well until the third postoperative day when he complained of abdominal pain. He was treated conservatively but developed more abdominal distention with hypoactive bowel tones and tympany on examination. Leukocytosis was noted, with an increase in the white blood cell count from 7000 to 14700 per cubic millimeter (normal, 4400 to 11000 per cubic millimeter). A computed tomographic (CT) scan revealed a right femoral hernia with incarcerated small bowel **(Figure 1)**. The patient was taken to the operating room for an explor-

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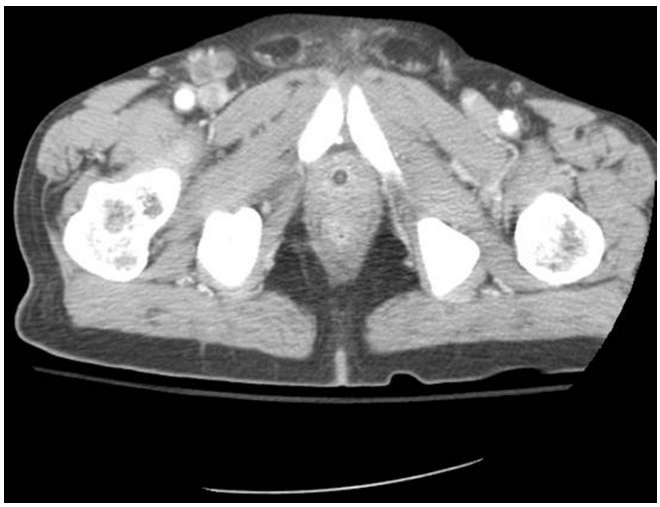

Figure 1. Computed tomographic scan demonstrates right femoral hernia with incarcerated small bowel.

atory laparotomy and repair of a right femoral hernia. Fifteen centimeters of perforated ischemic small bowel was resected, and a primary small bowel anastomosis was performed. The patient regained bowel function 7 days after repair of his hernia and partial small bowel resection and was discharged home.

DISCUSSION

Exacerbation of an occult hernia after laparoscopy is a rare complication. Our case represents what we believe to be the third reported occurrence of femoral hernia after laparoscopy. That this was a pelvic procedure may be a contributing factor. Occult hernias and small fascia defects may not always be apparent preoperatively, but extension of pneumoperitoneal insufflation to extraperitoneal compartments should alert the surgeon to the possible presence of such a defect. When this occurs, a high index of suspicion should be maintained for potential complications. In the future, we would strongly consider simultaneous hernia repair in similar situations.

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